



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,810	12/27/2001	Jay G. Staiger	US010702	5520
22850	7590	11/15/2006	EXAMINER	
C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			O'STEEN, DAVID R	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/029,810	STAIGER, JAY G.	
	Examiner	Art Unit	
	David R. O'Steen	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 29-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12-27-01 and 3-10-2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Note to Applicant

1. Art Units 2611, 2614 and 2617 have changed to 2623. Please make all future correspondence indicate the new designation 2623.

Election/Restrictions

2. Applicant's election with traverse of Claims 1-28 in the reply filed on July 28, 2006 is acknowledged. The traversal is on the ground(s) that searching for Claims 29-36 does not pose a serious search burden. This is not found persuasive because Claims 29-36 are concerned with the internal construction of a cable modem termination package while Claims 1-28 deal with the topology of a data network. These two inventions require two different searches.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-16, and 18-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Wright (US 5,841,468).

As regards Claims 1 and 15, Wright discloses a data communications system and method (fig. 1.10, col. 3, lines 34-57) comprising: a headend for generating a transmission signal (fig. 1.12, and col. 3, lines 36-39); a plurality of distribution hubs operationally coupled to said headend (fig. 1.14, and col. 5, lines 46-50); a plurality of fiber nodes (labeled as services sites, fig. 1.16, and col. 5, lines 56-60), each of said fiber nodes being operationally coupled to said distribution hub by a transmission cable (fig. 1.28) and a return cable (fig. 1.30), said transmission cable coupled to each fiber node providing said transmission signal to said fiber node (col. 5, lines 50-54); a plurality of service lines extending from each of said fiber nodes to operationally couple a plurality of subscriber sites (fig. 1.20) to each of said fiber nodes (col. 5, lines 48-50), and to provide said transmission signal received from said headend at each of said fiber nodes to said subscriber sites (col. 5, lines 61-65); and a plurality of cable modem termination packages (or spectrum parallel routers, which handle incoming messages from subscribers and route the messages accordingly as well as send any messages to the cable modem that are addressed to it, col. 3, lines 45-57) operationally coupled to one of said plurality of distribution hubs, one of said plurality of fiber nodes, or one of said plurality of service lines, said cable modem termination packages located downstream from said headend (col. 5, lines 1-20).

As regards Claims 2 and 16, Wright further discloses that the transmission signal includes a cable television signal (col. 3, lines 34-58).

As regards Claims 4 and 18, Wright further discloses that the cable modem termination packages are located at said fiber nodes (col. 5, lines 3-10).

As regards Claims 5 and 19, Wright further discloses that the cable modem termination packages are located at said subscriber sites (col. 5, lines 10-15).

As regards Claims 6 and 20, Wright further discloses that the fiber nodes further include: an upstream connection operationally connected, by a plurality of first data carrying cables (figs. 1.28 and 1.30, and col. 5, lines 50-52), to a first distribution point (such as a distribution hub, fig. 1.14); and a downstream connection operationally connected by a plurality of second data carrying cables, to a second distribution point (such as through service lines, fig. 1.18, to a subscriber site, fig. 1.20, and col. 5, lines 48-50).

As regards Claims 7 and 21, Wright further discloses that the plurality of first data carrying cables are fiber optic cables (col. 5, lines 54-57).

As regards Claims 8 and 22, Wright further discloses that the plurality of second data carrying cables are fiber optic cables (col. 5, lines 52-54).

As regards Claims 9 and 23, Wright further discloses that the plurality of second data carrying cables are co-axial cables (col. 5, lines 54-56).

As regards Claims 10 and 24, Wright further discloses that the first distribution point is a distribution hub (col. 5, lines 50-52).

As regards Claims 11 and 25, Wright further discloses that the first distribution is a fiber node (in an all-fiber network, all nodes are fiber nodes, which Wright counts as one of his embodiments, col. 5, lines 52-54).

As regards Claims 12 and 26, Wright further discloses that the second distribution point is a fiber node (in an all-fiber network, all nodes are fiber nodes, which

Wright counts as one of his embodiments, col. 5, lines 52-54. Moreover, Wright's invention allows for many levels in the distribution system, cols. 5 and 6, lines 66-67 and 1-5).

As regards Claims 13 and 27, Wright further discloses that the second distribution site is a subscriber site (col. 5, lines 48-50).

As regards Claims 14 and 28, Wright further discloses that the first distribution point is a distribution hub (col. 5, lines 50-52).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright (US 5,841,468) in view of Navar (US 7,080,400).

As regards Claims 3 and 17, Wright discloses the system and methods of Claims 1 and 15 but fails to disclose that the cable modem termination packages are located at said distribution hubs. Navar discloses that the cable modem termination packages are located at said distribution hubs (fig. 1.150 and col. 8, lines 18-21).

At the time of the invention, it would have been obvious to one skilled in the art to combine the placement of the cable modem termination packages as done in Navar, an analogous art, with the CATV system and method of Wright because placing the

CMTPs in the distribution hub allows them to respond to many cable modems without having to be placed in the head-end itself.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. West (US 5,854,703) discloses a hybrid fiber optic-coaxial cable network with upstream communications capabilities.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R. O'Steen whose telephone number is 571-272-7931. The examiner can normally be reached on 8:30 to 5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/029,810
Art Unit: 2623

Page 7

DRO



CHRISTOPHER GRANT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600